

REPORTS ON THE FLORA OF THE BOSTON
DISTRICT,—XV.

CYPERACEAE.

CAREX, O TO Z.

C. Oederi Retz. Swampscott (*C. W. Swan*, Aug. 5, 1886, specimen in herb. N. E. Botanical Club).

C. Oederi Retz., var. **pumila** (Cosson & Germain) Fernald. Salt marshes, meadows and shores, from Cambridge (1840) and Revere northeastward along the coast.

C. oligosperma Michx. Cold bogs and meadows, rare; Tewksbury, Bedford, Concord, Wellesley, Norfolk.

C. pallescens L. Fields and meadows, common throughout.

C. panicea L. Wet fields and meadows; well distributed except in extreme northern and western towns. "Cambridge, swamps on Mr. Norton's estate, June, 1838, E. T. Jr." [*Edward Tuckerman*].

C. pedunculata Muhl. Peabody (*J. H. Sears*, July 10, 1881); Shaker Glen, Woburn (*Wm. Boott*, May 14, 1865; *E. F. Williams*, May 12, 1895; *J. M. Greenman*, May 2, 1897; *W. P. Rich & E. F. Williams*, May 9, 1897); Fresh Pond, Cambridge (no data, specimen in herb. Bost. Soc. Nat. Hist.); Bussey's Mt., Jamaica Plain [*W. Roxbury*] (*E. & C. E. Faxon*, May 30, 1879).

C. pennsylvanica Lam. Dry sterile soil, very common throughout.

C. pennsylvanica Lam., var. **lucorum** (Willd.) Fernald. Wilmington, Burlington, Stoneham, Malden, Medford, Norwood, Milton, Halifax.

C. platyphylla Carey. Rich woods; Andover, Hamilton, Salem, Cambridge, W. Roxbury; Middlesex Fells, according to Deane, Fl. Metrop. Park Comm. 93, 1896; Hingham, according to T. T. Bouvé, *The Botany of Hingham* 132, 1893.

[In Dame & Collins, Fl. Middlesex Co. 118, 1888, this species is recorded from Medford, collected by C. E. Perkins. An examination of the specimen in the New England Botanical Club Herbarium shows it to be *C. laxiflora* Lam., var. *patulifolia* (Dewey) Carey.]

C. polygama Schkuhr. Swamps and meadows; frequent from Canton, Norwood and Framingham northward.

C. prasina Wahlenb. Wet banks of brooks in woods, rare; Newburyport, Medford, Winchester, Arlington, Belmont, Framingham.

C. Pseudo-Cyperus L. Lowell (*C. W. Swan*, July 5, 1880); big spring, Purgatory Swamp, Norwood (*G. G. Kennedy*, June 30, 1908).

C. ptychocarpa Steud. Purgatory Swamp, Norwood (various collections from June 23, 1879 to June 4, 1899); "near Boston" (*Wm. Boott*, no date, specimen in Gray Herb.).

C. retroflexa Muhl. Dry open woods; Boxford, Malden, Stoneham, Woburn, Newton, W. Roxbury, Dedham, Milton; Concord and Melrose, according to Dame & Collins, Fl. Middlesex Co. 119, 1888.

C. riparia W. Curtis. Swamps and stream-borders; occasional in central and northeastern portions.

C. rosea Schkuhr. Woods, common, but not reported from southeastern towns.

C. rosea Schkuhr, var. **radiata** Dewey. Andover (*A. S. Pease*, June 6, 1904, specimen in herb. A. S. Pease).

C. rosea Schkuhr, var. **minor** Boott. Shaker Glen, Woburn (*C. W. Jenks & C. W. Swan*, July 10, 1888); "Concord Turnpike" (*Wm. Boott*, June 10, —).

C. rostrata Stokes. Bogs and wet shores; frequent in central portion; one station between N. Andover and Boxford, in Essex Co.

C. rostrata Stokes, var. **utriculata** (Boott) Bailey. Reported as frequent from Randolph and Norwood northward.

C. salina Wahlenb., var. **kattegatensis** (Fries) Almq. (var. *cuspidata* Wahlenb.). Brackish shores of Mystic River and Alewife Brook in Medford (*Wm. Boott*, June 13, 1853; June 13, 1858; May 29, 1870; *T. Morong*, June 25, 1878; *E. & C. E. Faxon*, June 26, 1879); Arlington (*Wm. Boott*, July 18, 1858; June 16, 1861); Arlington and Medford (*F. S. Collins*, July 8, 1887); Cambridge (*Wm. Boott*, July 10, 1859); brackish marsh, Newburyport (*F. F. Forbes*, June 13, 1903).

C. salina Wahlenb., var. **kattegatensis** (Fries) Almq. × **stricta** Lam. Medford (*Wm. Boott*, June 13 and June 20, 1858; *T. Morong*, June 25, 1877); Winchester (*Wm. Boott*, May 22, 1870); Arlington (*Wm. Boott*, June 18 and July 1, 1883; *F. S. Collins*, June 10 and July 8, 1887); Cambridge (*Wm. Boott*, June 11, 1858 and June 2, 1867; *E. Tuckerman*, no date). The Tuckerman specimen was

collected in wet swamps on Fresh Pond, and is in the Gray Herbarium. On the label in Francis Boott's handwriting is "C. vulgaris Fries." Tuckerman wrote on the label "very much like some of my foreign specimens of C. stricta." Torr.! litt. C. stricta vera, fide Greene!" Carey has a long note on the sheet.

C. scabrata Schwein. Swamps, bogs and wet woods. Not reported from northwestern or southeastern towns; eleven scattered stations from Andover to Wrentham.

C. scirpoides Schkuhr. Swamps and meadows, occasional throughout.

C. scirpoides Schkuhr, var. **capillacea** (Bailey) Fernald. No reports from southeast, but frequent elsewhere.

C. scoparia Schkuhr. Open places, very common.

C. scoparia Schkuhr, var. **condensa** Fernald. Occasional in northern two-thirds of district, probably elsewhere.

C. scoparia Schkuhr, var. **moniliformis** Tuckerm. Ipswich (*K. M. Wiegand*, July 6, 1908); Cambridge (*E. Tuckerman*, no date); S. Sudbury (*M. L. Fernald, W. P. Rich and E. F. Williams*, June 17, 1902); Dedham (*C. H. Knowlton*, June 13, 1908).

C. seorsa E. C. Howe. Wet woods and swamps; Georgetown, Stoneham, Arlington, Acton, Stowe, Needham, Dorchester, Milton, Norwood, Canton, Randolph, Walpole.

C. setacea Dewey, var. **ambigua** (Barratt) Fernald. Dry open places; scattered stations throughout.

C. siccata Dewey. Dry sandy places; common in northern half; south of Boston and Framingham, reported only from Sharon.

C. silicea Olney. Sea-beaches and sand-dunes from Plum Island to Duxbury; also inland at Andover, Bedford, Concord and Readville [Hyde Park].

C. sparganioides Muhl. Rich woods, rare; Essex County (*Wm. Oakes*, no date); Oak Island, Revere (*H. A. Young*, June 1, 1879, July 9, 1882; *E. & C. E. Faxon*, June 10, 1879); Melrose (*H. A. Young*, June 5, 1879); Shaker Glen, Woburn (*E. F. Williams*, May 30, 1896); "Winchester (*C. E. Perkins*); Concord (*E. S. Hoar*); Malden (*F. S. Collins*)" according to *Dame & Collins, Fl. Middlesex Co. 119, 1888* [The Concord specimen of Mr. Hoar's proves to be *C. muricata* L.]; occasional, Blue Hills and Middlesex Fells, according to *Deane, Fl. Metrop. Park Comm. 94, 1896*.

C. squarrosa L. N. Andover, one specimen only, between

Shawsheen and Merrimac, near Sutton's Mills Station (*J. Robinson*, Aug. 5, 1879); waste ground, Cambridge (*W. Deane*, June 27, 1887). Adventive from further west.

C. stellulata Good. Wet open ground, common.

C. stellulata Good., var. **angustata** Carey. Framingham (*E. C. Smith*, June, 1897); cedar swamp, Walpole (*C. H. Knowlton*, June 17, 1908).

C. stellulata Good., var. **cephalantha** (Bailey) Fernald. Many reports from central third of district.

C. stellulata Good., var. **excelsior** (Bailey) Fernald. Frequent from Stoneham, Wellesley and Natick south to Mansfield and Walpole.

C. sterilis Willd. Swamps, marshes and meadows; not reported from western third of district, but doubtless frequent throughout.

C. stipata Muhl. Swamps and wet meadows, common.

C. straminea Willd. Fields, woods and borders of brooks from Sherborn, Sharon and Milton northeast to West Newbury and Plum Island.

C. stricta Lam. Forming tussocks in wet places, very common.

C. stricta Lam., var. **angustata** (Boott) Bailey. Sixteen scattered stations in central part of district.

C. stricta Lam., var. **curtissima** Peck. Malden, Medford, Wilmington, Belmont, Milton, Westwood.

C. stricta Lam., var. **decora** Bailey. Occasional in central part of district.

C. tenella Schkuhr. Moist woods and wooded swamps; Billerica, Concord, Randolph, Dedham, Norwood, Canton, Walpole.

C. tetanica Schkuhr, var. **Woodii** (Dewey) Bailey. Open peat-bog, S. Sudbury (*M. L. Fernald, W. P. Rich & E. F. Williams*, June 17, 1902).

C. tribuloides Wahlenb. Moist fields and woods, frequent in northern half.

C. tribuloides Wahlenb., var. **reducta** Bailey. Cambridge, Belmont, Milton, Norwood, Wellesley or Dover; Mill Dam, Boston or Brighton (*Wm. Boott*, June 5, 1853).

C. tribuloides Wahlenb., var. **turbata** Bailey. Medford, Cambridge, Dedham, Canton.

[*C. TRICHOCARPA* Muhl. In Dame & Collins, Fl. Middlesex Co. 116, 1888, is the following reference to this species: "Concord (*E. S. Hoar*; specimen in herb. of); Ashland (*Rev. Thos. Morong*)."] The

specimen collected by the late Edward S. Hoar is in his herbarium which has recently been presented to the New England Botanical Club by his daughter, Mrs. M. B. L. Bradford of Concord, Massachusetts. Examination proves it to be *C. vesicaria* L. The herbarium of Rev. Thomas Morong is in the Herbarium of the New York Botanic Garden at Bronx Park, New York City, and, through the kindness of Dr. J. K. Small, the Ashland plant has been examined and identified as *Carex hirta* L. It was collected in low, grassy ground, on June 30, 1877. I have in my herbarium specimens of *C. hirta* L. collected by Dr. Morong in Ashland, June, 1877, and labelled *C. trichocarpa* Muhl. This is probably of the same collecting as the specimen just referred to. Prof. L. H. Bailey wrote me in 1884 in regard to this plant, "An interesting find. It is *C. hirta* L. . . . I have not the species from this country, so I took a piece." I also have two specimens of *C. hirta* L. collected by Dr. Morong in Ashland, July 6, 1885. These Ashland plants have been recorded in *Rhodora* xiii. 250, 1911, under *C. hirta* L.

Prof. Bailey published a note on *C. hirta* L. in the *Botanical Gazette* for June, 1885, on page 295. He mentions its general resemblance to *C. trichocarpa* and says, "Introduced from Europe. Ashland, Mass., 1877, *Thos. Morong*; in ballast, Philadelphia, 1880, *F. L. Scribner*; and about Boston, *Wm. Boott*. Mr. Morong writes me as follows in regard to this species: 'I have collected it for several years in succession. I first found it by the roadside in rather low lands and afterwards in yards around dwellings, among grass. I presume from these situations that it must have been introduced into this locality.' " *Carex trichocarpa* Muhl. has been found in New England only in the western portions, while *C. hirta* L. has occurred at several stations in eastern Massachusetts (see *RHODORA* xii. 188, 1910). — W. DEANE.]

C. trisperma Dewey. Swamps, meadows and wet woods; apparently frequent, but not reported from southeastern portion.

C. trisperma Dewey, var. **Billingsii** Knight. Wenham, Wakefield, Melrose, Tewksbury, Chelmsford, Littleton, Natick, Duxbury.

[*C. TUCKERMANI* Boott. In *Dame & Collins*, *Fl. Middlesex Co.* 115, 1888, is the following reference to this species: "Concord (E. S. Hoar, and specimen in Thoreau Herb.)." The herbarium of Edward S. Hoar, including the Carices, among other plants, collected by his intimate friend, Henry D. Thoreau, contains the specimens above

mentioned. The plant collected by Thoreau proves to be *C. rostrata* Stokes. The specimens collected by Mr. Hoar are *C. vesicaria* L., var. *monile* (Tuckerm.) Fernald. I have in my herbarium, a specimen of the same collecting, given me by Mr. Hoar. It, also, is *C. vesicaria* L., var. *monile* (Tuckerm.) Fernald. Mr. Hoar's label reads; "Concord, June 9, 1858. River meadows, very common," a statement well applying to *monile*, specimens of which I have from four separate stations along the Concord River in Concord, collected by Mr. Thoreau and Mr. Hoar. *Carex Tuckermani* is not known to occur in eastern Massachusetts.—W. DEANE.]

C. umbellata Schkuhr. Dry sandy and rocky soil, frequent in eastern half of district.

C. umbellata Schkuhr. var. **brevirostris** Boott. Melrose (*G. G. Kennedy*, May 3, 1896).

C. umbellata Schkuhr, var. **tonsa** Fernald. Halifax (*A. S. Pease*, May 30, 1907).

C. varia Muhl. Dry woods and open places, common as far south as Milton and Norwood.

C. varia Muhl., var. **colorata** Bailey. Grassy bank, Wellesley (*K. M. Wiegand*, May 29, 1908); Mt. Chickatawbut, W. Quincy (*J. R. Churchill*, May 20, 1900); Halifax (*A. S. Pease*, May 30, 1907).

C. vesicaria L. Wet meadows, marshes and swamps, frequent.

C. vesicaria L., var. **jejuna** Fernald. Andover (*A. S. Pease*, June 9, 1903); Bedford (*J. Murdoch, Jr.*, June 7, 1902); Framingham (*E. C. Smith*, July 7, 1897); upper meadow, Milton (*J. R. Churchill*, July 17, 1898).

C. vesicaria L., var. **monile** (Tuckerm.) Fernald. Same range as the type.

C. vestita Willd. Sandy or gravelly soil in sun or shade, common.

C. vestita Willd., var. **Kennedyi** Fernald. Near Silver Lake, Wilmington (*G. G. Kennedy*, June 11, 1899). The type station, and the only station known. Published in *RHODORA* ii. 170, 1900.

C. virescens Muhl. Dry woods and open places, common in central portion.

C. virescens Muhl., var. **Swanii** Fernald. Common in central portion, extending north to Tewksbury and south to Walpole, Sharon, and Wrentham.

C. vulpinoidea Michx. Swamps and moist places, common.

C. Willdenowii Schkuhr. "Above the waterfall on the west side

of the path," Malden [now Melrose]. (*Wm. Boott*, June 11, 1863), also Malden [probably Melrose] (*Wm. Boott*, June 6, 1853); Arlington (*Wm. Boott*, June 6, 1853); dry woods, Ponkapaug, Randolph (*J. R. Churchill*, June 26, 1897). See *RHODORA* xii. 187, 1910.

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THE ALGAE OF A MARSHY POND.

BY A. B. KLUGH, M. A.

ON Barriefield Common near Kingston, Ontario, is a clay-bottomed marshy pond, whose algal flora is worthy of record because of its richness. This pond is only about 20 yards in diameter and is about $2\frac{1}{2}$ feet deep in the centre. The richness of this pond appears to me to be due to two causes; firstly that the pond never completely dries up, and I have it on the authority of Dr. Knight that during his long residence in Kingston he has never known it to be dry, and secondly that being shallow the water becomes warm during the summer. All the species mentioned below were collected either on July 21st or July 23rd, 1911. On the first occasion only one vial of material was collected, but on finding it so rich I returned on the 23rd and secured four more vials of material.

I wish here to thank Mr. F. S. Collins for his careful examination of such material from this pond as I sent him.

The species listed do not represent the entire algal flora of this pond as I found many species which were not in fruit and consequently not determinable with certainty.

The species marked with an asterisk are those which are here recorded from Canada for the first time.